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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/647,620	10/03/2000	Katsumi Tahara	450108-02465	2391

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EXAMINER
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CZEKAJ, DAVID J

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 12/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/647,620	Applicant(s) TAHARA ET AL.	
	Examiner Dave Czekaj	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/27/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 5-8, and 10-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoogenboom (5517250) in view of Yonemitsu et al. (5461420), (hereinafter referred to as "Yonemitsu").

As for claim 1, Hoogenboom teaches of encoding means for encoding said input video data to generate an elementary stream and describing, in said elementary stream information about the picture order of said elementary stream (Hoogenboom: column 10, lines 8-27. Note: the information about the picture order is contained in the sequence of pictures header which is contained in the PES); and generation means for receiving said elementary stream and generating time stamp information about said elementary stream from said picture order information described in said elementary stream (Hoogenboom: column 6, lines 6-14. Note: the time stamp that deals with the picture order information is also known as the PTS by definition (i.e. presentation time stamp)). However, Hoogenboom fails to disclose counting means and converting

means as claimed. Yonemitsu teaches that prior art coding techniques encounter problems when they are applied without modification to non-interlaced signals (Yonemitsu: column 1, lines 48-51). To help alleviate this problem, Yonemitsu discloses "counting means for counting fields in the input video data" (Yonemitsu: column 5, lines 49-52, wherein the 2-3 pulldown detection performs the counting), "converting means, connected between the counting and encoding means, for converting the input video having a particular frequency into video with a second frame frequency" (Yonemitsu: figure 3, column 5, lines 57-61, wherein the field order re-arrangement circuit performs the converting), and "the encoding means generates time stamp information based on the counting means" (Yonemitsu: figure 3, wherein the coder will update the header containing the time stamp information for the new signal). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Hoogenboom and add the counting and converting means taught by Yonemitsu in order to obtain an apparatus that reduces the amount of errors encountered when processing different types of signals.

As for claim 5, Hoogenboom teaches of said time stamp information contains decoding time stamps and/or presentation time stamps (Hoogenboom: Column 7, Lines 5-14).

As for claims 6 and 7, Hoogenboom teaches of said generation means comprises means for generating a packetized elementary stream by packetizing said

elementary stream and adds said time stamp information to the header of said packetized elementary stream (Hoogenboom: Column 9, Lines 39-46).

As for claim 8, Hoogenboom teaches of said time stamp information contains presentation time stamps and/or decoding time stamps (Hoogenboom: Column 7, Lines 5-14); and said generation means generates a packetized elementary stream by packetizing said elementary stream and adds said presentation time stamps and/or decoding time stamps as the header of said packetized elementary stream (Hoogenboom: Column 9, Lines 39-46).

As for claim 10, although not disclosed, it would have been obvious to convert a 30 Hz signal into a 24 Hz signal using a 3:2 pulldown process (Official Notice). Doing so would have been obvious in order to easily switch between the two different types of formats.

As for claims 11 and 18, Hoogenboom teaches of encoding means for encoding said input video data to generate an elementary stream and describing, in said elementary stream, information about the picture order of said elementary stream; and a packetizer for packetizing said elementary stream, based on said picture order information described in said elementary stream (Hoogenboom: column 4, lines 2-22, column 10, lines 8-27. Note: the information about the picture order is contained in the sequence of pictures header which is contained in the PES).

As for claims 12, 16, 17, 19, 22 and 23, most of the limitations of the claim are contained in the above rejection of claim 1. Hoogenboom also teaches of a packetizer for packetizing said elementary stream, based on the information used to generate said

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presentation time stamps described in said elementary stream (Hoogenboom: Column 4, Lines 12-22).

As for claims 14 and 20, most of the limitations of the claim are contained in the above rejection of claim 12. Hoogenboom also teaches of multiplexing the video streams (Hoogenboom: Column 9, Lines 13-22).

As for claims 15, 21, 24, 25, and 26, Hoogenboom teaches of encoding means for encoding said plurality of input video data to generate a plurality of elementary streams and describing, in each of said elementary streams, time stamp information about the decoding and/or presentation of said elementary streams; and multiplexing means for receiving said plurality of elementary streams and multiplexing said plurality of elementary streams, based on said time stamp information added in said each elementary stream (Hoogenboom: Column 9, Lines 13-22).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoogenboom (US 5,517,250) in view of Yonemitsu et al. (5461420), (hereinafter referred to as "Yonemitsu"), in further view of Azadegan (US 5,612,900).

As for claims 2 and 3, most of the limitations of the claims have been discussed

in the above rejection of claim 1. Hoogenboom does not explicitly teach of said encoding means describes said picture order information in the picture layer of said elementary stream, however, Azadegan does (Note: Azadegan Figures 9A-C show the picture layer log files that contain the information about the picture order (i.e. input\_order of the pictures, what fields to repeat, the sequence header, the GOP number, etc.). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to place the picture order information in the picture layer because of the picture layers direct connection with what is displayed and its control over the encoded and decoded field coefficients.

As for claim 4, most of the limitations of the claims have been discussed in the above rejection of claims 1 and 2. Hoogenboom also teaches said generation means extracts said picture order information from said elementary stream by parsing the syntax of said elementary stream (Hoogenboom: column 10, lines 6-16. Note: the parser parses the sequence header (which contains the order) for information that is needed).

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoogenboom (US 5,517,250) in view of Yonemitsu et al. (5461420), (hereinafter referred to as "Yonemitsu") in further view of Cismas (US 5,646,693).

As for claim 9, most of the limitations of the claim are contained in the above rejection of claim 1. Hoogenboom does not explicitly teach of picture order information generated by counting the fields in said input video data, however, Cismas does (Cismas: column 9, lines 15-54. Note: the number of fields are counted in order to see

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what the sequence of frames (i.e. picture order) becomes). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to count the fields to generate picture order because this allows for a repeat frame to be detected (i.e. when used in a 3:2 pull-down arrangement).

7. Claims 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoogenboom (US 5,517,250) in view of Yonemitsu et al. (5461420), (hereinafter referred to as "Yonemitsu") in further view of Kimura (US 5,568,165).

As for claims 27-30, most of the limitations of the claims are discussed in the above rejection of claims 22, 25, and 26. Hoogenboom does not teach of decoding time stamps are information generated based on the number of fields in said source video data, however, Kimura does (See Kimura Figure 8 and Column 12, Lines 4-12).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to base the time stamps on the number of fields because this would allow less information to have to be transmitted from the encoder to the decoder. If the encoder has a direct relationship between the two then the number of fields won't have to be transmitted to the decoder also.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Czekaj whose telephone number is (571) 272-7327. The examiner can normally be reached on Monday - Friday 9 hours.

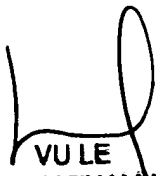
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on (571) 272-7950. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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PRIMARY EXAMINER